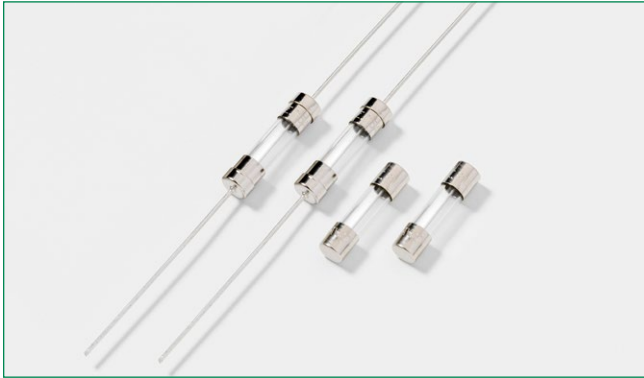


213 Series, 5x20 mm, Time-Lag Fuse



Description

5x20mm time-Lag surge withstand glass body cartridge fuse designed to IEC specification.





Features

- Designed to International (IEC) Standards for use globally
- Available in cartridge and axial lead form
- Meets the IEC 60127-2, Sheet 3 specification for time-Lag fuses
- RoHS compliant and lead-free.

Applications

Used as supplementary protection in appliance or utilization equipment to provide individual protection for components or internal circuits.

Agency Approvals

Agency	Agency File Number	Ampere Range
	Cartridge: NBK090205-E10480A NBK120802-E10480C	1A-5A 6.3A
	Leaded: NBK090205-E10480B NBK120802-E10480D	1A-5A 6.3A
	2003010207045592	0.200A – 6.3A
	E10480	0.200A – 6.3A
029862		
1914693		
40015638		
	KM41462	0.200A – 6.3A
	SU05001-12002 SU05001-12001	3.15A-5A 6.3A
	N/A	0.200A – 6.3A

Electrical Characteristic for Series

% of Ampere Rating	Ampere Rating	Opening Time
150%	All Ratings	60 minutes, Minimum
210%		2 minutes, Maximum
275%		0.6 sec., Min.; 10 sec. Max.
400%		.15 sec., Min.; 3 sec. Max.
1000%		0.02 sec., Min.; 0.3 sec. Max.

Additional Information



Datasheet












Resources

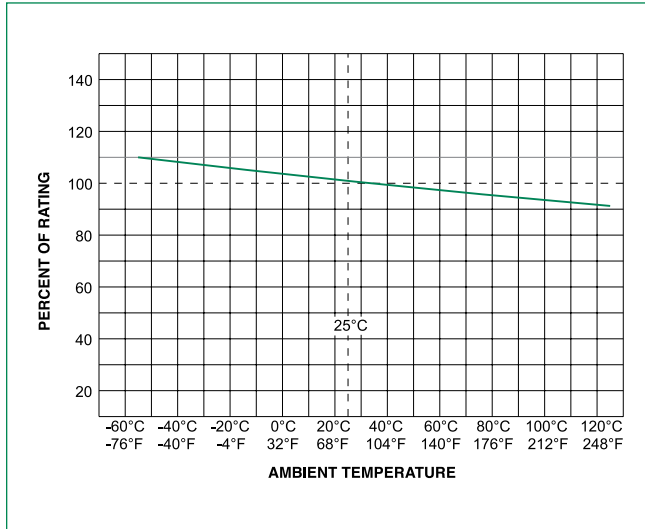


Samples

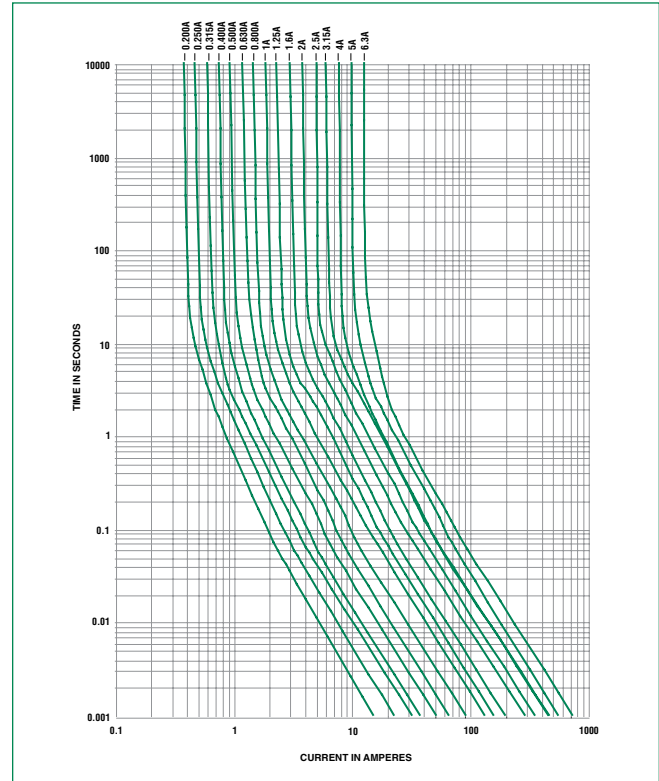
Electrical Characteristic Specifications by Item

Amp Code	Ampere Rating	Voltage Rating (V)	Interrupting Rating	Nominal Cold Resistance (Ohms)	Nominal Melting I ² t (A ² sec)	Maximum Voltage Drop at Rated Current (mV)	Maximum Power Dissipation at 1.5I _n (W)	Agency Approvals								
																
0.2	0.2	250	35A@250Vac	1.6000	0.22500	1500	1.6	x	x	-	x	x	x	x	-	x
0.25	0.25	250		1.0495	0.55500	1300	1.6	x	x	-	x	x	x	x	-	x
0.315	0.315	250		0.8475	1.14000	1100	1.6	x	x	-	x	x	x	x	x	x
0.4	0.4	250		0.5350	1.36000	1000	1.6	x	x	-	x	x	x	x	x	x
0.5	0.5	250		0.3700	2.90500	900	1.6	x	x	-	x	x	x	x	x	x
0.63	0.63	250		0.2750	4.80000	300	1.6	x	x	-	x	x	x	x	x	x
0.8	0.8	250		0.1635	9.42000	250	1.6	x	x	-	x	x	x	x	x	x
1.0	1	250		0.1165	19.20000	150	1.6	x	x	x	x	x	x	x	x	x
1.25	1.25	250		0.0817	27.15000	150	1.6	x	x	x	x	x	x	x	x	x
1.6	1.6	250		0.0551	44.20000	150	1.6	x	x	x	x	x	x	x	x	x
2.0	2	250		0.0452	92.70500	150	1.6	x	x	x	x	x	x	x	x	x
2.5	2.5	250		0.0305	138.00000	120	1.6	x	x	x	x	x	x	x	x	x
3.15	3.15	250		0.0231	202.00000	100	1.6	x	x	x	x	x	x	x	x	x
4.0	4	250		40A@250Vac	0.0170	226.50500	100	1.6	x	x	x	x	x	x	x	x
5.0	5	250	50A@250Vac	0.0116	314.00000	100	1.6	x	x	x	x	x	x	x	x	
6.3	6.3	250	63A@250Vac	0.0095	600.00000	100	1.6	x	x	x	x	x	x	x	x	

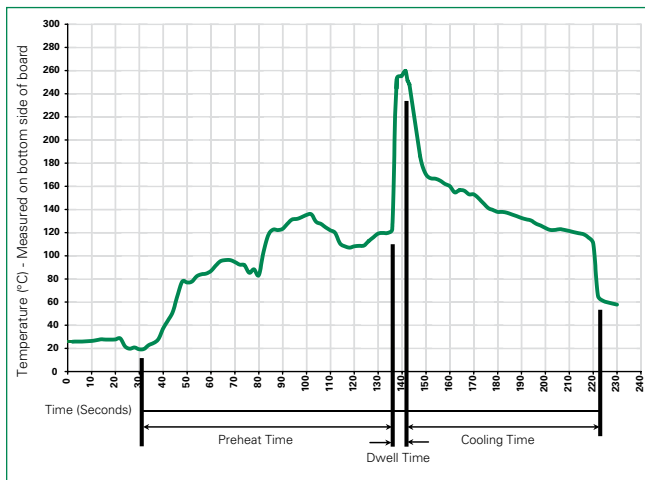
Temperature Re-rating Curve



Average Time Current Curves



Soldering Parameters - Wave Soldering



Recommended Process Parameters:

Wave Parameter	Lead-Free Recommendation
Preheat: (Depends on Flux Activation Temperature)	(Typical Industry Recommendation)
Temperature Minimum:	100° C
Temperature Maximum:	150° C
Preheat Time:	60-180 seconds
Solder Pot Temperature:	260° C Maximum
Solder Dwell Time:	2-5 seconds

Recommended Hand-Solder Parameters:

Solder Iron Temperature: 350° C +/- 5° C
Heating Time: 5 seconds max.

Note: These devices are not recommended for IR or Convection Reflow process.

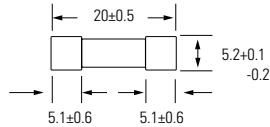
Product Characteristics

Material	Body: Glass Cap: Nickel-plated brass Leads: Tin-plated Copper
Terminal Strength	MIL-STD-202, Method 211, Test Condition A
Solderability	MIL-STD-202, Method 208
Product Marking	Cap1: Brand logo, current and voltage Cap2: Agency approval marks Series
Packaging	Available in Bulk (M=1000 pcs/pkg) or on Tape/Reel (MRET1=1000 pcs/reel)

Operating Temperature	-55°C to +125°C
Thermal Shock	MIL-STD-202, Method 107, Test Condition B: (5 cycles -65°C to +125°C)
Vibration	MIL-STD-202, Method 201
Humidity	MIL-STD-202, Method 103, Test Condition A. High RH (95%) and elevated temperature (40°C) for 240 hours.
Salt Spray	MIL-STD-202, Method 101, Test Condition B

Dimensions

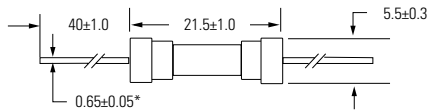
0213 000P



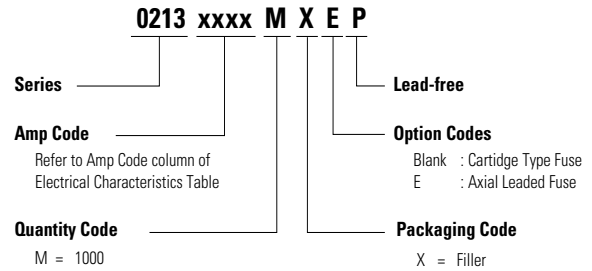
0213 000 XEP

Note:

- All dimensions in mm



Part Numbering System



Packaging

Packaging Option	Packaging Specification	Quantity	Quantity & Packaging Code	Taping Width
213 Series				
Bulk	N/A	1000	MX	N/A
Bulk	N/A	1000	MXE	N/A
Reel and Tape	N/A	1000	MRET1	T1=53mm (2.087")
Bulk	N/A	1000	MXG	N/A
Bulk	N/A	1000	MXB	N/A
Bulk	N/A	100	HX	N/A

Mouser Electronics

Authorized Distributor

Click to View Pricing, Inventory, Delivery & Lifecycle Information:

Littelfuse:

[021302.5MRET1P](#) [0213005.MRET1P](#) [213.4](#) [2133.15](#) [0213002.XP](#) [0213.400M-](#) [0213.250MXEP](#) [0213002.MXE-](#)
[02131.25MXE-](#) [02133.15MXEP](#) [021301.6MXE-](#) [0213.315M-](#) [0213.630MXEP](#) [0213005.MXEP](#) [0213005.M-](#)
[02131.25M-](#) [02133.15M-](#) [0213004.MXEP](#) [021302.5MXP](#) [0213005.MXE-](#) [021306.3MXP](#) [0213.800MXEP](#)
[0213001.MXE-](#) [0213.800M-](#) [0213004.MXP](#) [0213.200MXP](#) [0213.630M-](#) [0213.500MXEP](#) [02133.15MXP](#)
[021301.6MXEP](#) [0213001.MXEP](#) [021306.3MXE-](#) [0213002.MXEP](#) [021301.6MXP](#) [0213.630MXE-](#) [0213001.M-](#)
[021302.5M-](#) [02131.25MXP](#) [0213.250MXP](#) [021306.3MXEP](#) [021302.5MXEP](#) [02133.15XP](#) [0213.400XP](#) [02133.15XEP](#)
[21306.3](#) [0213001.MRET1P](#) [02131.25MXBP](#) [213005](#) [2133.15XE](#) [0213005.XP](#) [0213.400MXP](#) [02131.25MXEP](#)
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[0213.400MXE-](#) [0213004.MXE-](#) [0213002.MXP](#) [0213.400MXEP](#) [0213.800MXE-](#) [0213.800MXP](#) [0213.200MXEP](#)
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[0213.250MRET1P](#) [02131.25MRET1P](#) [02133.15MRET1P](#) [02133.15MXBP](#) [0213.250TXP](#) [0213.800TXP](#)
[0213002.TXP](#) [0213.315TXP](#) [0213005.TXP](#) [02133.15HXP](#) [021306.3MRET1P](#) [021306.3TXP](#) [0213.200MXBP](#)
[0213.250MXBP](#) [0213.315MXBP](#) [0213.400MXBP](#) [0213.500MRET1P](#) [0213.500MXBP](#)